CLATMS

- A method of making a stacked microelectronic assembly comprising the steps of:
- I. providing a flexible substrate having a plurality of attachment sites, said flexible substrate including a first surface and a second surface and having a plurality of electrically conductive terminals accessible at at least one of said first and second surfaces; test contacts accessible at at least one of said first and second surfaces; and wiring connected to said terminals and test contacts and flexible leads extending to said attachment sites;
- II. assembling a plurality of microelectronic elements to said attachment sites;
- III. electrically connecting said microelectronic elements and said leads;
- IV. folding said flexible substrate and stacking at least some of said microelectronic elements in substantially vertical alignment with one another; and
- V. maintaining said stacked microelectronic elements in said substantially vertical alignment, wherein said conductive terminals are exposed at a bottom end of said stacked assembly.
- The method of claim 1, wherein the test contacts are exposed at a top end of said stacked assembly.

- 3. The method claim 2, wherein the terminals are accessible at the second surface and at least some of the test contacts are accessible at the second surface.
- The method of claim 3, wherein at least some of the test contacts are accessible at the first surface.
- $\label{eq:comprising} {\tt 5.} \quad {\tt The method of claim 2, further comprising the} \\ {\tt step of} \\$

disposing a spacer the flexible substrate between two adjacent microelectronic elements.

- The method of claim 5, further comprising the step of adhering the spacer to the flexible substrate.
- $\label{eq:total_comprising} 7. \quad \text{The method of claim 2, further comprising the} \\ \text{steps of} \quad$

 $\label{eq:placing} \mbox{placing a dam between two adjacent microelectronic}$ $\mbox{elements:}$

disposing a curable liquid encapsulant composition between each of said two adjacent microelectronic elements and the flexible substrate;

curing the curable liquid encapsulant composition to form an encapsulant; and

removing the dam before folding the flexible substrate.

- 8. A method of making a microelectronic assembly, comprising the steps of:
- I. providing a flexible substrate have at least one attachment site, said flexible substrate including a first surface and a second surface and having a plurality of electrically conductive terminals accessible at at least one of said first and second surfaces; electrically conductive test contacts accessible at at least one of said first and second surfaces; and wiring connected to said terminals and said test contacts and including flexible leads extending to said attachment sites;
- $\label{eq:interpolation} {\tt II.} \quad {\tt assembling} \ \, {\tt a} \ \, {\tt microelectronic} \ \, {\tt element} \ \, {\tt to} \ \, {\tt said}$ attachment site;
 - III. electrically connecting said microelectronic element to said leads;
 - IV. folding said flexible substrate into a folded configuration having a folded portion; and
- V. maintaining said flexible substrate in said folded configuration, said microelectronic element in said folded configurations;
- VI. wherein said conductive terminals are exposed at a bottom end of said microelectronic assembly and said text contacts are exposed at a top end of said microelectronic assembly.